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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Michael Roberts

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EXAMINER

SPISICH, MARK

ART UNIT

PAPER NUMBER

3723

MAIL DATE

DELIVERY MODE

12/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/692,916	Applicant(s) ROBERTS ET AL.	
	Examiner Mark Spisich	Art Unit 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 55 and 57-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 55 and 57-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 October 2007 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 55, 57 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 1-72128 (hereinafter '128) in view of Dolinsky (USP 4,288,883) and Chen (USP 5,334,646). '128 discloses an oral brush comprising a handle (3) with a head portion (1) at an end thereof and which head portion includes a brush portion including a plurality of non-elastomeric (nylon) bristles as well as a plurality of elastomeric bristles (page 5, line 28 thru page 6, line 4 of the attached translation). The preferred (or at least one of the two) elastomer may be either polyester based or polystyrene based thermoplastic elastomer (see page 4 of the attached translation) or block copolymers. With regard to the "radiused terminal end" (claim 55, line 7), the patent to Dolinsky discloses rubber

massage members (22a) (column 1, lines 46-50) with rounded or radiused terminal ends (fig 4 and column 2, lines 26-27). It would have been obvious to one of ordinary skill to have rounded the ends of the bristles (both elastomeric as well as conventional) of '128 to reduce any damage to the user's gums. With regard to the particular material, the patent to Chen discloses the recited material (styrene-ethylene-butylene-styrene block copolymer, abstract, lines 1-4) along with a plasticizing oil which is further recognized by Chen as being used in a dental floss (column 7, lines 18-41). It is further pointed out that '128 discloses that the same engineering elastomer that is used to make up the elastomeric member on the oral brush may also be used as dental floss (in the translation, the last paragraph of page 4 as well as lines 9-13 of page 6). It would thus have been obvious to one of ordinary skill to have chosen the material of Chen to comprise the elastomeric members (eg, 12) of '128 in that (1) '128 discloses the genus of the recited material and (2) Chen discloses the recited material used in the same environment. It has further been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. With regard to the hardness, the prior art is also used as an oral brush and that one of ordinary skill would deem it obvious to select material that would not hard the user's gums or teeth.

3. Claims 59 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 1-72128, Dolinsky (USP 4,288,883) and Chen (USP 5,334,646) as applied to claim 55 above, and further in view of Muhler et al (USP 3,616,143). The prior art discloses the invention substantially as claimed with the exception of the non-

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elastomeric (nylon) bristles including an abrasive. The patent to Muhler discloses an oral brush including plastic (nylon; column 3, line 26) including a dental abrasive (column 3, line 15) and having a diameter of 8 mil (column 8, line 44). It would have been obvious to one of ordinary skill to have modified the non-elastomeric (nylon) bristles of '128 as such to me effectively clean and polish tooth surfaces.

Response to Arguments

4. Applicant's arguments filed 30 October 2007 have been fully considered but they are not persuasive. For the most part, the arguments are repetitive with respect to those previously filed. As such the prior response is repeated. Firstly with regard to the addition of the oil to the elastomer, it is VERY WELL KNOWN in the art to add such a material in order that it might be easier to work with during manufacture. The motivation to provide the oil to the elastomer need not be the same one as that used by applicant. With regard to the hardness, the prior art discloses elastomers which are used in the same environment as the present invention. One of ordinary skill, if only through common sense and routine experimentation, would be well aware of which degrees of hardness would be appropriate in the environment of the prior art. It's not that the references are disclosed as being used in a totally different environment as the present invention such that one could argue that one would not want to use a material of a particular hardness. With regard to the patent to Dolinsky (USP 4,288,883), this is relied on solely to teach the radiused terminal ends of the massaging elements. Applicant argues that the material in Chen (5,334,646) is gelatinous in the manner of a "gummy bear". It is pointed out that the material of Chen is disclosed as usable as

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dental floss (column 7, lines 18-41). A “gummy bear” material clearly would not be usable in this manner. With regard to the adding of the oil, page 11 of the specification merely states that oils (among any number of additives) could be added without stating any reason or benefit for doing so. Attorneys’ arguments do not constitute evidence with regard to any non-obvious discovery. The addition of an oil plasticizer to elastomers is very well known and it is this that the patent to Chen is primarily relied on to illustrate. It is noted that the present case does not recite (or even disclose) a particular level of oil. The patent to Chen does disclose the known and claimed material (styrene-ethylene-butylene-styrene block copolymer) at least in a similar environment or use (as dental floss). Once a material is established as being useful or appropriate for use in a particular environment, one of ordinary skill could resort to routine experimentation to determine properties or optimization that might be necessary. It is further noted that the present applicant pretty much discloses that any number of thermoplastic elastomers could be used to practice the invention without disclosing the benefit any one compared to the other. Only when the examiner finds one of the materials is the criticality of one of the other materials alleged.

Conclusion

5. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued

examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Spisich whose telephone number is (571) 272-1278. The examiner can normally be reached on M-Th (5:30-3:00), Alternate Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Spisich/
Primary Examiner, Art Unit 3723

Mark Spisich
Primary Examiner
Art Unit 3723

/M. S./